

ABSTRACT

A magnetic disk comprises, on a substrate, a soft magnetic layer, a seed layer, and a recording layer having an artificial lattice structure. The soft magnetic layer is formed of Co and B, and the seed layer is formed of Pd and B. The structure can reduce the magnetic exchange coupling force in the in-plane direction acting between crystal grains of the recording layer. Therefore, minute recording magnetic domains can be formed in the recording layer, the magnetization transition area is distinct, and the medium noise is reduced. Even when information is recorded at a high density, the information can be reproduced with low medium noise. The thermal stability is also excellent, because the recording layer composed of the artificial lattice structure has high magnetic anisotropy.